

Receiving Report

Date: 10/6/88

Supplier: MS GWS

Packing Slip: Yes No
 Invoice: Yes No
 Receipt: Cash Cr

Batch No: M115347

Dart P/O: 12080

Release Note Attached: Yes No N/A
 Waybill Attached: Yes No N/A
 Shipment Complete: Yes No N/A
 QC6 Inspection N/A
 Work Order N/A

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 LL

Production/Admin:

Date 10/6/88

Received/Costing

Initial LL

Location

Purchase Order Receipt Listing

Page 1 of 1

June 28, 2010 7:33:57 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO12080 Receipt Dates from 6/28/2010 to 6/28/2010 All Line Item Types

All Item ID/GL/WOs All Rec Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date/ Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name	VC-MAG002	Magna Stainless									
PO12080	1		M303B0.750X1.500 f		6/23/2010	6/28/2010	24.0000	\$32.50	0.0000	0	\$780.00
CAD	No		303 BAR .750" X 1.500" 115047			24.0000 DCUSER		\$780.00	0.0000	0	
	2		M303B2.000X1.750 f		6/23/2010	6/28/2010	24.0000	\$82.50	0.0000	0	\$1,980.00
	No		303 BAR 2" X 1.750" f 115047			24.0000 DCUSER		\$1,980.00	0.0000	0	
									Total Received Quantity:		48.0000
									Total Qty to Inspect (PO U/M):		0.0000
									Total Reject Quantity:		0.0000
									Total Receipt Value:		\$2,760.00
									Total Balance Due Quantity:		0.0000

Page 1 of 1

I028998

I028998

SOLD TO:
 DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

SHIP TO:
 DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Contact: CHANTAL LAVOIE

Ship Terms: PREPAID



MTR:Y

SPECIAL INSTRUCTIONS

*****INCOMING***

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS	MAGNA SALES	(613) 632-5200	(613) 632-1053	12080	
Sales Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
W031422	NET 30 DAYS	NIR:R-557065-1	06/16/10	06/28/10	06/28/10

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
2		PC	STAINLESS - LB 303 FLAT 3/4" X 1 1/2" X 12' LG			2
2		PC	303 FLAT 1 3/4" X 2" X 12' LG	94 LB / 2 PC L040386	E212478	2
			MATERIAL IS PER ASTM A582	286 LB / 2 PC L040387	E208306	2
<i>P01/4/28</i>						
with W031420						
Bundles: 1						
Approx Weight:						380 LB

Received by: _____ Date: _____ Signature: _____

MONTANSTAHL
 special profiles in steel 

0.4339

 Tel: +41-911-6416-800
 Fax: +41-911-6416-804
 Email: info@montanstahl.com

mill test certificate

Flat - ACD 0.75 x 1.5 Inch 11-13'

Customer specs according to

Customer specs

size in mm's
PT 111

303

ASTM A582/A582M

807301-807309

Order
Consign Stock #3
(29886, 29560)Net weight:
8642 lbsExecution:
ACDMelting:
EAF/AOD

E212478

	C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Al	N	Cu	Pb	V	Co
	0.059	0.81	1.70	0.032	0.269	8.56	17.71	0.35			0.022	0.63		0.10	

Test no. 807309

Yield strength: R_{0.2} 440 N/mm²

88 kN

U-bend test

46 %

Area reduction

55 %

Hardness

168

Impact test

KV

- We hereby confirm that the material certified in this document is conform to enclosed data sheet
- Material is produced in compliance with ROHS (2002/95/EC)
- Material free from Mercury and radioactive contamination

- Country of melt: Spain
- Country of manufacturing origin: Switzerland



20.10.2009

Inc 06-22-10

 S00616PR047-1 MAGNA STAINLESS PO: P010523 Part #:
 2.00PC 94.00LB

C8448



Montanstahl
CH - 6855 Stabio

PT111

DATA SHEET FOR ACD STAINLESS STEEL FLAT BARS IN
GRADES 303, 304 / 304L AND 316 / 316L

Applicable standards		Rev.	Grade			
			AISI - 303 ^b UNS - S30300	AISI - 304/304L UNS - S30400 UNS - S30400	AISI - 316/316L UNS - S31600 UNS - S31603	
ASTM	A320/A320M	2003	X			X
	A484/A484M	2003a	X	X		X
	A582/A582M	1995b	X			
	A276	2004		X		
	A370-03B	2003	X	X		X
	A479/A479M	2004		X		X
AMS	5640U (type 1)	2007	X			
	2241N	2003	X			
	5653F	2002				
	5648K	2002				X
	S 7720 A	1997				X
	5639H (type 1)	2002		X		X
	5647H	2002		X		
	2248E	1993		X		X
ASME	QQS 763A	2003		X		X
	SA479 + S2.1	1998		X		X

Chemical values

Grade	C ^a	S ^a	Mn	Ni	Cr	Mo	S ^b	P ^b	N ^b	Cu ^b	Co ^b	Zr ^b
303	0,15	1	2 ^b	8-10	17-19	0,6 ^b	0,35 ^b	0,15	0,1	0,75	0,1	0,60
304/304L	0,03	0,75	2 ^b	8-10,5	18-20	0,5 ^b	0,03	0,04	0,1	0,50	0,1	
316/316L	0,03	0,75	1-2	10-14	16-18	2-3	0,03	0,04	0,1	0,75	0,1	

^a Maximum values

^b For thicknesses $\leq 0,25''$; S_{min} = 0,20

Mechanical values^(b)

Grade	Thickness	TS ^(b) [KSI]	YS ^(b) [KSI]	EL ^(b) [%]	RA ^(b) [%]	HB ^(b)
303	Up to 0,5"	75	30	30	40	140-241
	Over 0,5"	75	30	35	50	223
304/304L	Up to 0,5"	90	45	30	40	140-223
	Over 0,5"	75	30	40	50	140-223
316/316L	Up to 0,5"	90	45	30	40	140-223
	Over 0,5"	75	30	30	40	140-223

^(b) Maximum values; hardness is measured in centerline of width after removal of specific surface layer (see ASTM A320)

^a Minimum values

^b Cold drawn flat bars are not intentionally strain hardened but drawn to specific dimensional tolerances.

^b Cold drawn flat bars have a higher magnetic permeability than HRAP flat bars.

- Solution annealed at 1050°C and water quenched
- Intergranular corrosion test according to ASTM A262 practices A, C & E (where applicable)
- Micro and macro structure: OK
- Grain size per ASTM E112: 5-7
- No welding or weld repairs
- Material free of contamination from mercury or metals liquid at ambient temperature


MONTANSTAHL
 special profiles in steel

 Via Gernetta 4
 CH - 6855 Stabio
 Tel.: +41-91-6416800
 Fax: +41-91-6473718
 email: info@montanstahl.com

003095

 Werksabnahmeverifikat / mill test certificate
 certificat d'essais / certificato di collaudo

 Produkt / product / produit / prodotti
 Flat - ACD 1.78 x 2 Inch 11-13"

 MONTANSTAHL AG, Via Gernetta 4, CH-6855 Stabio
 Firma / company / maison / ditta

Werksabnahmeverifikat nach: mill test certificate according to: certificat d'essais selon: certificato di collaudo secondo:	Customer specs		Auftrag-Nr. order no. commande n° n° ordine																																																																													
Maßnahm / size standards / norme dimensionnelle / normativa dimensionale		Nettogewicht / net weight / poids net / peso netto 2571 lbs																																																																														
PT 111		Ausführung / execution / état de livraison / esecuzione ACD																																																																														
Größe / grade / classe / qualità 303		Bünde / bundles / fardeaux / fasci 776523, 776525, 776527																																																																														
Gütekenn / size standards / norme dimensionnelle / normativa dimensionale ASTM A582/A582M																																																																																
Enthärtung / metting / équilibrage / fusione EAF/AOD																																																																																
<table border="1"> <tr> <th>Stahlart / heat / coulée / colata</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Ni</th> <th>Cr</th> <th>Mo</th> <th>Ti</th> <th>Al</th> <th>N</th> <th>Cu</th> <th>Pb</th> <th>V</th> <th>Co</th> </tr> <tr> <td>E208306</td> <td>0.070</td> <td>0.68</td> <td>1.73</td> <td>0.029</td> <td>0.263</td> <td>8.63</td> <td>17.50</td> <td>0.31</td> <td></td> <td></td> <td>0.022</td> <td>0.64</td> <td></td> <td></td> <td>0.10</td> </tr> <tr> <td>Zugfestigkeit tensile strength résistance traction limite di trazione</td> <td colspan="3">Streckgrenze yield strength limite d'elasticité limite di sforzamento</td><td colspan="2">Dehnung elongation allongement allungamento</td><td colspan="2">Einschneidung area reduction réduction sottrazione</td><td colspan="2">Härte hardness dureté durezza</td><td colspan="3">Kerbbrucharbeit Impact test résilience resilienza</td><td colspan="2">KV</td></tr> <tr> <td>Rm</td> <td colspan="2">Rp 0.2% 95 ksi</td><td colspan="2">Rp 1% 65 ksi</td><td colspan="2">AS</td><td colspan="2">Z</td><td colspan="2">67 %</td><td colspan="2" rowspan="2">164</td><td colspan="2"></td></tr> <tr> <td></td> <td colspan="3"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="3"></td><td colspan="2"></td></tr> </table>				Stahlart / heat / coulée / colata	C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Al	N	Cu	Pb	V	Co	E208306	0.070	0.68	1.73	0.029	0.263	8.63	17.50	0.31			0.022	0.64			0.10	Zugfestigkeit tensile strength résistance traction limite di trazione	Streckgrenze yield strength limite d'elasticité limite di sforzamento			Dehnung elongation allongement allungamento		Einschneidung area reduction réduction sottrazione		Härte hardness dureté durezza		Kerbbrucharbeit Impact test résilience resilienza			KV		Rm	Rp 0.2% 95 ksi		Rp 1% 65 ksi		AS		Z		67 %		164																		
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- We hereby confirm that the material certified in this document is conform to enclosed data sheet

- Material is produced in compliance with ROHS (2002/95/EC)
- Country of melt: Germany
- Country of manufacturing origin: Switzerland


 Herstellerzeichen
 Trade Mark
 Signe du Producteur
 Logo del produttore

 Datum
 Date
 Date
 Data

15.09.2008

 Der Werksrechtsvertreter
 The Works' Inspector
 L'Agent Réceptionnaire de l'Usine
 Il certificatore

C8449

**DATA SHEET FOR ACD STAINLESS STEEL FLAT BARS IN
GRADES 303, 304 / 304L AND 316 / 316L**

Applicable standards		Rev.	Grade		
			AISI - 303 ⁽¹⁾ UNS - S30300	AISI - 304/304L UNS - S30400 UNS - S30400	AISI - 316/316L UNS - S31600 UNS - S31603
ASTM	A320/A320M	2003	X		
	A484/A484M	2003a	X	X	X
	AS82/AS82M	1995b	X		
	A276	2004		X	X
	A370-03a	2003	X	X	X
	A479/A479M	2004		X	X
AMS	S640U (type 1)	2007	X		
	2241N	2003	X		
	S653F	2002			
	S648K	2002			X
	S 7720 A	1997			X
	S639H (type 1)	2002		X	
	S647H	2002		X	
	2248E	1993		X	X
QQ S 763A		2003		X	X
ASME SA479 + S2.1		1998		X	X

Chemical values

Grade	C ⁽¹⁾	Si ⁽¹⁾	Mn	Ni	Cr	Mo	S ⁽¹⁾	P ⁽¹⁾	N ⁽¹⁾	Cu ⁽¹⁾	Co ⁽¹⁾	Zr ⁽¹⁾
303	0,15	1	2 ⁽¹⁾	8-10	17-19	0,6 ⁽¹⁾	0,35 ⁽¹⁾	0,15	0,1	0,75	0,1	0,60
304/304L	0,03	0,75	2 ⁽¹⁾	8-10,5	18-20	0,5 ⁽¹⁾	0,03	0,04	0,1	0,50	0,1	
316/316L	0,03	0,75	1-2	10-14	16-18	2-3	0,03	0,04	0,1	0,75	0,1	

⁽¹⁾ Maximum values

⁽²⁾ For thicknesses ≤ 0,25": S_{min} = 0,20

Mechanical values⁽¹⁾⁽²⁾

Grade	Thickness	TS ⁽³⁾ [KSI]	YS ⁽³⁾ [KSI]	EL ⁽³⁾ [%]	RA ⁽³⁾ [%]	HB ⁽³⁾
303	Up to 0,5"	75	30	30	40	140-241
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⁽²⁾ Minimum values

⁽³⁾ Cold drawn flat bars are not intentionally strain hardened but drawn to specific dimensional tolerances.

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- Solution annealed at 1050°C and water quenched
- Intergranular corrosion test according to ASTM A262 practices A, C & E (where applicable)
- Micro and macro structure: OK
- Grain size per ASTM E112: 5-7
- No welding or weld repairs
- Material free of contamination from mercury or metals liquid at ambient temperature



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO12080**

Purchase Order Date 6/14/10

PO Print Date 6/14/10

Page Number 1 of 1

Order From :

VC-MAG002

MAGNA STAINLESS
5775 RUE KIERAN
ST LAURENT, QC H4S 0A3
CA

Contact Name
Vendor Phone 800 363 6646
Vendor Fax 514 339 1105
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED
(6/14/10)

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M303B0.750X1.500	303 BAR .750" X 1.500"	6/23/10 Yes	24.00 f	Yours ppd	\$32.5000	\$780.00

Special Inst: MATERIAL: AISI 303 SS BAR AS PER
ASTM A582
NOTE: AISI 304/316 NOT ACCEPTABLE

2	M303B2.000X1.750	303 BAR 2" X 1.750"	6/23/10 Yes	24.00 f	Yours ppd	\$82.5000	\$1,980.00
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Special Inst: AS ABOVE

Rewkpe
PO Total: \$2,760.00

**MATERIAL CERTIFICATION
REQ'D UPON DELIVERY**

M

CL

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 6/14/10